# WEBINAR ON



# **Guided Pathways**

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#### **Davis Jenkins**

Senior Research Scholar, Community College Research Center

#### **Bill Seymour**

President, Cleveland State Community College

#### **Diane Snyder**

Vice Chancellor for Finance & Administration, Alamo Colleges District

#### **Charles Ansell**

Vice President of Research, Policy & Advocacy, Complete College America

### A national whole-college transformation movement

Over **300 colleges** are part of formal state and national guided pathways reform initiatives. Others are implementing pathways reforms on their own.



### Guided pathways | Redesigned for access and success

**Clarify paths to** student end goals

Help students get on a path

**Keep students on path** 

**Ensure students are** learning along their path

- Organize programs by field (meta-major) to facilitate exploration and engage students in an academic and career community
- Backward map all programs from good jobs and/or transfer in a major
- Help all new students (including high school dual enrollment and adult ed students) explore options and interests, connect with an academic/career community, and make a purposeful program choice
- Replace prerequisite remediation with teaching students to be effective learners in college-level program foundation courses
- Ensure all new students have a term 1 "light the fire" learning experience
- Help all new students develop a full-program learning and financial plan by end of term 1
- Schedule courses and monitor students' progress based on plans  $\bullet$
- Introduce students to practice of the field through active learning in classes
- Ensure every student gains program-relevant experience

### **College leaders have questions about GP costs.**



What reforms should we prioritize?

Is guided pathways a good value for students and the college?

### **Research questions**

- What are the costs of implementing guided pathways at an "average" 1. community college?
- 2. What are the initial and ongoing costs of guided pathways reforms? How do they vary by college?
- How are colleges funding implementation costs and sustaining support 3. for guided pathways practices?
- 4. How can college leaders estimate the costs of guided pathways and develop a plan for funding them?

### New CCRC publications on guided pathways economics

	REPORT   OCTOBER 2020
TEACHERS COLLEGE, COLUMBIA UNIVERSITY	<b>Funding C</b> A Guide for Co
	Davis Jenkins   Amy E. Bro
The Economics of Guided Pathways: Cost, Funding, and Value Clive Belfield Queens College, City University of New York	6 98-
October 2020 CCRC Working Paper No. 123	C
Address correspondence to: Clive Belfield Professor of Economics Queens College, City University of New York 65-30 Kissena Boulevard Flushing, NY 11367 Email: clive.belfield@qc.cuny.edu	
Funding for this research was provided by The Kresge Foundation and the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the funders. The author appreciates research support from Amy Brown, Maggie Fay, Davis Jenkins, and Hana Lahr and comments from Charles Ansell, Brooks Bowden, Jessica Brathwaite, Thomas Brock, Veronica Minaya-Lazarte, and Doug Slater.	CCCRC COMMUNITY COLLEGE RESEARCH CENTER TEACHERS COLLEGE, COLUMBIA UNIVERSITY

#### **Guided Pathways** ommunity College Leaders

own | Maggie P. Fay | Hana Lahr



### Main takeaways

#### **Cost of GP**

- GP requires estimated +3% extra resources (price-adjusted)
  - Biggest implementation costs: Engagement, planning, training, new/upgraded info systems
  - <u>Biggest operating cost</u>: Additional advisors for case management by meta-major

#### **Funding strategies**

- GP colleges use grant funding for start-up engagement, planning, and capacity building
- GP colleges make a strategic shift from numerous small, often disconnected interventions to large-scale changes in roles, practices, and systems under GP model
- GP colleges rely as much or more on reorganization, reassignment, and reallocation of staff and other resources than on raising new income to fund ongoing costs

#### Value to student and college

- GP offers clear economic value for students that would offset tuition increases
- GP college leaders say GP improves program value, student momentum/outcomes, COVID responsiveness

#### isted) hing, new/upgraded info systems gement by meta-major



# **Question 1**

What are the costs of implementing guided pathways at an "average" community college?

# Sample for estimating costs at an "average" CC

- 12 separately accredited colleges across seven institutions implementing guided pathways (including two multicollege districts)
- Representative of the community college sector in terms of:
  - Student demographics (but higher representation of Hispanic students)
  - Tuition/fees
  - Students' loan rates and earnings 10 years after college
- Distinctive from the sector in terms of:
  - 150% graduation rates: 17%, compared with national average of 23%
  - Students per cohort: 5,700, compared with national average of 4,500
- national average of 23% tional average of 4,500

#### CCR

## Method for estimating costs at an "average" CC

- Identify all resources needed to implement and operate guided pathways
- Implementation takes 3–5 years; operating costs are annual thereafter
- For each component:

Inputs: personnel time, facilities, IT Cost = sum of (input x price per input)

- 100+ interviews with college personnel, documents/evidence from site visits, and previous research on reforms implemented at each college Budgets do not identify amounts spent on reform
- "Average" community college as around 4,000 FTE enrollment with approximately \$60M operating budget

# Implementation costs are much higher than operating costs, and advising is by far the most costly element.

	Implementation (For 4 Years)		Operating Cost (Price-Adjusted)	
1. Program mapping	\$855,600	12%	\$89,700	6%
2. Success courses	\$360,900	5%	\$90,100	6%
3. Student advising	\$3,699,500	52%	\$894,500	63%
4. Teaching and learning	\$173,600	2%	\$43,400	3%
5. Governance and management	\$587,800	8%	\$96,400	7%
IT investments	\$681,400	10%	\$81,900	6%
Professional development	\$474,100	7%	\$99,100	7%
Other direct costs	\$311,700	4%	\$14,900	1%
Total resource cost	\$7,144,600		\$1,410,000	
Total cost/FTE (annualized)	\$450		\$350	

# Estimates for smaller and larger colleges show that there are some economies of scale.

	Implementation Cost (Over 4 Years)	Operating Cost (Price-Adjusted)
Total resource cost		
2,000 FTEs	\$4.47m	\$0.89m
4,000 FTEs	\$7.14m	\$1.41m
10,000 FTEs	\$17.72m	\$3.46m
Total cost/FTE (annualized)		
2,000 FTEs	\$670	\$450
4,000 FTEs	\$450	\$350
10,000 FTEs	\$370	\$350

## Main takeaways about GP costs for an "average" college

#### **Average costs**

- GP is more costly to implement than maintain
- Advising is by far the most costly element of the reform
- GP requires +3% extra resources (price-adjusted)
- Some economies of scale exist



# **Question 2**

What are the initial and ongoing costs of GP reforms? How do they vary by college?



# Sample

- Six institutions:
  - 2 multicollege districts
  - 4 colleges with collective bargaining
- All early adopters of core GP practices at scale (starting in 2014–2016)
- All participated in AACC Pathways Project 1.0



2 small rural colleges 1 large urban college

### Enrollment range (3,200-61,000) and operating budget range (\$25M-\$385M) of sample

Institution	Enrollment (Fall 2018)	Annual Operating Budget (FY 2020)
Alamo Colleges District	60,818	\$385 mill
Bakersfield College	24,589	\$163 mill
Cleveland State Community College	3,264	\$25 mill
Cuyahoga Community College	23,440	\$365 mill
Jackson College	5,083	\$48 mill
Pierce College District	10,520	\$63 mill

### Method

- 80+ interviews with college personnel
- Documents/evidence from site visits to colleges (November 2019– February 2020)
- Knowledge of reforms implemented at each college from GP SOAA research

# Colleges encountered similar types of initial costs.



#### Colleges

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### Some ongoing costs were more common across colleges than others.



#### Colleges

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# Main takeaways | Costs

#### Largest initial costs:

- Information systems to support websites with enhanced program maps, educational planning, case-management advising, and class scheduling
- Faculty stipends for program mapping •
- Coordination of reforms
- Staff training •
- Largest ongoing costs:
  - Additional advisors to enable case-management advising by field (largest cost overall)



# **Question 3**

How are colleges funding implementation costs and sustaining support for guided pathways?

# Some strategies for funding GP reforms were more common across colleges than others.



#### Colleges

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# Improvements for students and college business associated with guided pathways reforms.



# Main takeaways | Funding strategies

- All GP colleges used grant funding for start-up engagement and capacity building
- All GP colleges made a strategic shift from numerous small, often disconnected initiatives to large-scale changes in roles, processes, and systems under GP model
- GP colleges relied as much if not more on reorganization, reassignment, and reallocation of staff and other resources as on raising new income to fund ongoing costs
- Reforms have led to increased value for colleges and students, including first-year credit momentum and, for some colleges, increased IPEDS retention and graduation rates and reduced non-degree-applicable credits. Institutions in states with performance funding achieved substantial gains.

# Sustaining support for guided pathways practices

All six colleges:

- cite evidence of improved outcomes for students and competitive position for college—including better COVID responsiveness—thanks to GP
- institutionalized GP practices and continue to build on GP reforms (e.g., rethinking dual enrollment as a program on-ramp and providing programrelevant experiential learning for all students)
- reorganized program administration, planning, review, and budgeting around GP; some changed hiring practices

Guided pathways represents a new community college business model focused on attracting and retaining students with affordable, high-value programs and strong student supports





# **Question 4**

How can college leaders estimate the costs for GP and develop a plan for funding them?

### Estimating costs: Step one

Estimate how much revenue the college could generate by retaining more of the students it loses because of college practices resulting in:

- students without an educational plan, particularly part-time students
- students in low-opportunity programs •
- dual enrollment students post-high school •
- students in non-credit workforce and adult basic skills programs who would benefit from credit programs but lack guidance

## Planning guide and data tool for colleges on access to higher-opportunity pathways

- 1. What programs are our students currently enrolled in?
- Which programs lead to 2. greater or lesser opportunity?
- Is student representation 3. across programs proportionate?





completing is particularly important given that some community college programs lead to substantially higher economic returns than others (Belfield & Bailey, 2017; Dadgar & Trimble, 2015). A substantial literature base reveals not only that returns to higher education programs are stratified but also that this stratification operates along racial/ethnic, gender, and socioeconomic lines (Carnevale et al., 2016; Castex & Decher, 2014). Though this research has focused primarily on the four-year sector, it may be that community colleges are in even more danger of facilitating inequitable stratification since their programs vary by subject area as well as length (corresponding, e.g., to short- and long-term certificates, applied associate degrees, and associate of arts degrees designed to prepare students for upward transfer to bachelor's degree programs). There is a wide range in the economic returns to different types of community college awards, with longer programs and those leading to bachelor's degrees in math-intensive fields, for example, leading to stronger labor market returns.



#### **Unpacking Program Enrollments and Completions** With Equity in Mind

By John Fink and Davis Jenkins

Across the country hundreds of community colleges are implementing

whole-college guided pathways reforms to create clearer paths to college and career success for students.1 The aim of these reforms is to help students explore and decide upon career and education goals that align with their interests and aspirations, and to plan and complete a program of study to achieve those goals. As part of these reforms, colleges redesign intake and advising processes around broad career fields sometimes called "meta-majors"; this helps entering students make sense of the large number of program options that are available and engages them with faculty, advisors, and other students in a field of interest right from the start (Jenkins et al., 2020). Guided pathways reforms are challenging for colleges to pursue; they entail the participation of all staff

in modifying practices around a far-reaching notion of student success (Jenkins et al., 2019). They require a shift in mindset wherein college personnel ask not only "Are students persisting and completing?" but also "Do our programs really lead to the education and career outcomes students seek?" and "Is student representation across our programs equitable?"

Critically examining what programs students are entering and

A substantial literature base reveals not only that returns to higher education programs are stratified but also that this stratification operates along racial/ethnic.gender.and socioeconomic lines

### Categorizing community college programs by postgraduation opportunity

Description	
Program places students into jobs with low average earnings (e.g., less than \$14/hour)	Crimi Techi
Program places students into relatively middle-paying job (e.g., between \$14-\$17.55/ hour)	Acco Mana
Program places students into a relatively high-paying job (e.g., more than \$17.55/ hour)	Nursi Sono
Program designed for general transfer (no pre-major or university destination necessarily specified)	AA-G "Gen
Program designed to prepare students for a particular baccalaureate major/meta-major and/or a specific four- year destination	AA-B AS-T
Listed as undeclared or missing program information	Null, Unde
Non-degree seeking, ESL, ABE, dual enrollment	Basic Start
	Program places students into jobs with low average earnings (e.g., less than \$14/hour) Program places students into relatively middle-paying job (e.g., between \$14-\$17.55/ hour) Program places students into a relatively high-paying job (e.g., more than \$17.55/ hour) Program designed for general transfer (no pre-major or university destination necessarily specified) Program designed to prepare students for a particular baccalaureate major/meta-major and/or a specific four- year destination

#### Examples

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ounting, Welding, Business agement, Dental Assistant

sing, Radiology Technology, ography, Dental Hygiene

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### Program explorer Excel tool

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### Estimating costs: Step two

Estimate what additional staff and information system resources would be needed to provide case-management advising for all degree-seeking students by meta-major—after redesigning onboarding, advising, and educational planning and redeploying existing systems and faculty and staff.

# Steps for developing funding strategies

- Seek funding from local philanthropic sources, Title III or Title V grants, or other sources to fund strategic visioning, campus and community engagement, and planning required to launch guided pathways reforms.
- 2. Budget collaboratively across divisions, making allocation decisions with focus on practices that improve recruitment, retention and completion in programs that lead to efficient transfer and good jobs.

### CCRC COMMUNITY COLLEGE RESEARCH CENTER

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

# Thank you!



🗠 ccrc@columbia.edu

#### 212.678.3091



# **Guide for college leaders: Appendix**

Costs by GP practice area

# Clarifying paths to student end goals

Practice	New Costs	Type*	Case Study Colleges
Organize programs by "meta-major"	Meta-major administrators	RC	ACD, BC, CCC, CSCC, JC
	Stipends for success team faculty leads	RC	BC
Map programs to job transfer outcomes	Faculty/staff stipends for program mapping	OTC	ACD, BC, CCC, JC, PCD
	Staff to create/update transfer maps	RC	ACD, CCC, JC
	Online course catalog	OTC + RC	CCC
	Program mapping tool	OTC + RC	BC
	Labor market consultant	OTC	ACD
Create program-relevant math pathways	Faculty professional development	OTC	ACD, JC
Redesign website for meta-majors/ program maps	Website development/updating	RC	ACD, BC, CCC, CSCC, JC, PCD
Strengthen employer input into programs	Advisory board coordination/meetings	RC	ACD

\*OTC = one-time cost. RC = recurring cost.

### Helping students get on a program path

Practice	New Costs	Type*	Case Study Colleges	
Redesign intake and orientation to help students	Staff time to redesign intake/orientation	OTC	ACD, BC, CCC, CSCC, JC, PCD	
explore careers/programs	Expanding career services staff	RC	BC, CSCC	
Focus first-year experience courses on	Faculty time to develop curriculum	OTC	ACD, CCC, CSCC, JC, PCD	
career/program exploration and planning	Training faculty	OTC	ACD, CCC, CSCC, JC, PCD	
Help all students develop a full-program plan	Purchasing/maintaining planning software	OTC + RC	ACD, BC, CCC, CSCC, JC, PCD	
	Training advisors/faculty to use software	OTC	ACD, BC, CCC, CSCC, JC, PCD	
	Consultant to oversee implementation	OTC	BC, PCD	
Implement corequisite remediation in math	Stipends for faculty to redesign courses	OTC	BC, CCC, CSCC, JC	
(related reform)	Hiring part-time instructors for added sections	RC	CSCC	
	Paired instructors in corequisite classes	RC	JC	
Implement corequisite remediation in English	Stipends for faculty to redesign courses	OTC	BC, CCC, CSCC, JC	
(related reform)	Paired instructors in corequisite classes	RC	JC	
Strengthen recruitment of high school students/	Hiring enrollment coaches/advisors	RC	ACD, BC	
others into GP programs	Training enrollment coaches/advisors	OTC	ACD, BC	
	Enrollment management consultant	gement consultant OTC ACD		
	Purchasing/maintaining CRM software	OTC + RC	ACD	
	Customized program maps for high schools	OTC + RC	BC, PCD	

\* OTC = one-time cost. RC = recurring cost.

ACD = Alamo Colleges District. BC = Bakersfield College. CCC = Cuyahoga Community College.

CSCC = Cleveland State Community College. JC = Jackson College. PCD = Pierce College District.

# Keeping students on path

Practice	New Costs	Type*	Case Study Colleges
Reorganize advising to allow case-management advising by meta-major	Hiring advisors to allow case management	RC	ACD, BC, CCC, CSCC, JC, PCD
	Training/certifying advisors	OTC	ACD, BC, CCC, CSCC, JC, PCD
	Purchasing/maintaining case-management software	OTC + RC	ACD, BC, CCC, JC
	Purchasing/maintaining texting software	OTC + RC	JC
Implement predictable scheduling based on educational plans	Purchasing/maintaining scheduling software	OTC + RC	BC, CCC, CSCC
	Additional staff to manage scheduling	RC	CCC
Offer financial incentives for full- time/summer enrollment	Summer scholarships	RC	ACD, BC, CCC

\* OTC = one-time cost. RC = recurring cost.

# Ensuring students are learning across their programs

Practice	New Costs	Type*	Case Study Examples
Strengthen teaching in critical	Instructional designer	RC	JC
program foundation courses	Instructional improvement department director	RC	CSCC, PCD
Expand experiential learning	Expanding career services staff	RC	ACD, BC, CCC
Expand experiential learning	·		,

\* OTC = one-time cost. RC = recurring cost.

### **Reform management and infrastructure**

Practice	New Costs	Type*	Case Study Colleges
Coordinate GP planning and implementation	College-wide convenings/ retreats	OTC	ACD, BC, CCC, JC, PCD
	Staff to coordinate/communicate	OTC	ACD, BC, CCC, JC, PCD
Create steering committees and workgroups	Professional development	OTC	ACD, BC, CCC, CSCC, JC, PCD
Upgrade/purchase software to support GP	Hiring more staff software developers	RC	ACD

\* OTC = one-time cost. RC = recurring cost.